

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

1-34. (Canceled)

¹
~~35.~~ (Previously presented) A method for detecting modification of MEK proteins or MAPK proteins of a Raf/MEK/MAPK pathway, comprising the steps of:

- a) placing a polymer gel contact mask having holes on a substrate, the holes together with the portions of the substrate which overlie the holes forming cavities;
- b) immobilizing inactive MEK proteins and inactive MAPK proteins on areas of the substrate underlying the holes of the polymer gel contact mask that have the size and orientation of wells of a 96 well, 384 well, 1536 well, or 3456 well microwell plate;
- c) exposing the inactive MEK proteins and inactive MAPK proteins to a solution of active Raf proteins, active MEK proteins, ATP, and potential inhibitors of at least one of the active Raf proteins or the active MEK proteins;
- d) allowing binding of the active Raf proteins and the active MEK proteins to the inactive MEK proteins and the inactive MAPK proteins; and
- e) detecting modification of the inactive MEK proteins or the inactive MAPK proteins of the Raf/MEK/MAPK pathway.

²
~~36.~~ (New) The method of claim ~~35~~¹, wherein detecting modification comprises the additional step of quantifying the amount present of the inactive MEK or inactive MAPK proteins of the Raf/MEK/MAPK pathway based on the modification thereof.

³
~~37.~~ (New) The method of claim ~~35~~¹, wherein detecting modification comprises the additional step of qualitatively or quantitatively determining the level of activity of the

inactive MEK or inactive MAPK proteins of the Raf/MEK/MAPK pathway based on the modification thereof.

⁴
~~38~~. (New) The method of claim ¹~~35~~, wherein detecting the modification comprises the additional step of identifying the affinity or avidity of the inactive MEK or inactive MAPK proteins of the Raf/MEK/MAPK pathway based on the modification thereof.

⁵
~~39~~. (New) The method of claim ¹~~35~~, further comprising removing the polymer gel contact mask from the substrate before exposing the inactive MEK proteins and inactive MAPK proteins to the solution of active Raf proteins, active MEK proteins, ATP, and potential inhibitors of at least one of the active Raf proteins or the active MEK proteins.

⁶
~~40~~. (New) The method of claim ¹~~35~~, wherein immobilizing the inactive MEK proteins and inactive MAPK proteins on areas of the substrate comprises forming a self-assembled monolayer on the substrate and binding the inactive MEK proteins and inactive MAPK proteins to the self-assembled monolayer.